DOCUMENT RESUME

ED 418 716 IR 057 016

AUTHOR Colaric, Susan M.
TITLE Students Who Do Not Currently Read Traditional Reserve Readings and Their Attitudes Toward Electronic Reserve.
PUB DATE 1998-04-00
NOTE 21p.; Master's Research Paper, University of North Carolina at Chapel Hill.
PUB TYPE Dissertations/Theses - Masters Theses (042) -- Reports - Research (143) -- Tests/Questionnaires (160)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Libraries; Computer Attitudes; Computer Mediated Communication; Computer Uses in Education; *Document Delivery; Full Text Databases; Higher Education; Information Sources; Information Technology; *Library Collections; Library Services; Nonprint Media; *Online Systems; Student Attitudes
IDENTIFIERS Electronic Resources; *Library Reserve; *Reserve Reading Rooms; University of North Carolina Chapel Hill

ABSTRACT

Reserve readings are a special collection in the university library, established by a professor to support a particular class. A recent study at the University of North Carolina, Chapel Hill found enthusiasm among current reserve users for an electronic reserve system (Petersen, 1996). The study described in this paper examined the reasons some students at the University of North Carolina, Chapel Hill are not using the traditional reserve reading system. A total of 132 students filled out the questionnaire. Results indicate that use of the reserve system may actually increase with the implementation of an electronic reserve system. Both users and non-users of the current paper-based reserve system perceive an electronic reserve system as being beneficial; 70.5% of the respondents indicated that they would be more likely to read the reserve readings if the full-text were available online or electronically. When asked what features they would like in an electronic reserve system, other than printing, 51.5% responded they would like to be able to e-mail a copy of the article; 26.9% said they would like to be able to download; 20% said none of the options were important. In regard to access to the system, 77.3% responded that 24-hour, seven-day access was essential or very important. Most of the problems reported by students in regard to the traditional reserve system have to do with accessing the readings and the physical condition of the readings. Results are compared with the Petersen study. (AEF)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

IR

ED 418 716

STUDENTS WHO DO NOT CURRENTLY READ TRADITIONAL RESERVE READINGS AND THEIR ATTITUDES TOWARD ELECTRONIC RESERVE

by
Susan M. Colaric

A Master's paper submitted to the faculty
of the School of Information and Library Science
of the University of North Carolina at Chapel Hill
in partial fulfillment of the requirements
for the degree of Master of Science
in Library Science

Chapel Hill, North Carolina

April, 1998

Approved by:

_____
Advisor

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Susan M. Colaric
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IR057016

Table of Contents

Introduction	2
Literature Review	3
Methodology	5
Results	9
Conclusion	11
References	13
Appendix A, Survey Responses	14
Appendix B, Codebook	18

Traditional paper reserve readings are being digitized and made accessible to students through computer networks, including the Internet. This involves a great deal of effort in developing and maintaining the systems. The material must be scanned, cleaned up, made available on a network, arranged and cataloged for easy access, and the computers maintained for student use. Students must have ample access to the network, be taught how to use the new system and have the option of reading on screen, printing or downloading to a disk. Library staff will need to learn to support yet another computer system. Is it worth the effort? Will this actually increase the use of reserve readings? Or will it become an expensive system for students who currently already use reserves to simply print out what they previously copied? If so, it may end up being an extensive undertaking to increase access to the few students who already use traditional reserve. But if developing an electronic reserve system would result in non-users reading the assignments there would be an added incentive to make the expenditures of personnel and financial resources.

A recent study at the University of North Carolina, Chapel Hill found enthusiasm among current reserve users for an electronic reserve system (Petersen, 1996). Yet the study focussed only on current users – those already making an effort to travel to the reserve reading area at the R.B. House Undergraduate Library. But what about those students who did not read any reserve material? A study at the University of Virginia found this could be as much as 50% of the students in a class that have assigned reserve readings (Self, 1987). Wouldn't it be beneficial to discover why these students aren't using reserves? This way, in the design of a new system, perhaps their reasons for not using the reserve system can be addressed resulting in an increase in students using the reserve reading system.

Literature Review

Reserve readings are a special collection, established by a professor to support a particular class. The material is usually in a closed stack system with a limited check-out time. This enables all students in the class to have an opportunity to access the material. Students learn of the reserve reading assignments through the professor, the class syllabus, or the reading list.

A study at the University of Nebraska at Lincoln discovered that of the 3,586 titles on reserve, 1,520 (42%) never circulated. The same study found that only 18% of all the titles on reserve circulated nine times or more (Carmack & Loeber, 1971). This particular study involved monographs but the low circulation rate is generally supposed to apply to journal articles also.

In 1987 James Self conducted a study at the University of Virginia to examine student use of the reserve collection and to correlate use with student grades. He discovered that in the fall semester, 45% of students in classes where reserved readings were assigned did not use any material placed on reserve; in the spring semester this figure climbed to 52%. In addition, only 5% of the students checked out more than half of the items on their reserve list. This low figure is hardly a ringing endorsement for spending the library's limited financial resources on the reserve reading system. In fact, among 8,454 students who were enrolled in courses with 10 or more items on reserve, only 1 student checked out all of the items on his or her list. Non-users (those with no checkouts) and low users (those with 1-5 checkouts) accounted for 79% which means only 21% of students made good use of the reserve reading system.

Yet, in the same study, Self found a positive correlation between grades and reserve usage. Non-users had a mean grade point average of 3.05, while those with 11 or more checkouts had a mean GPA of 3.32. In fact, using interval scale variables and regression analysis, Self found that, on average, each

use of reserve adds .013 points to the final grade. Although this only demonstrates how useful reserve use is as a predictor of grade and it is, in fact, a weak relationship ($R^2 = .014$), it does give an indication that reserve readings help a student understand the material (Self, 1987). It is assumed then that increasing the use of reserve readings can have educational benefits.

In 1996 Jacobs undertook a study at the University of Sussex to examine and describe students' use and non-use of the reserve collection. The questionnaire asked respondents to record whether they thought they used the reserve collection "often", "sometimes" or "never" and to give their reasons by answering the question "why." The reasons were then grouped into categories of "using reserve" and "not using reserve." Among those who did not use reserve, 36% indicated that the arrangement of the reserve collection was the reason and 34% thought it wasn't necessary to use the reserve collection (Jacobs, 1996). In order to increase student use of the collection, a first step may be to remove this perceived barrier of "arrangement of the collection."

When given the opportunity to change a system, such as that presented by moving from a traditional reserve system to an electronic reserve system, perhaps we should take the opportunity to reevaluate the entire idea. Buckland in "Print, Automated, Electronic: University Libraries in the Next Decade" suggests that in moving from the Paper Library to the Automated/Electronic Library we should reexamine the priorities, goals and successes of the old system and plan the new system to improve on past experience. The questions to ask are: "What are we trying to improve upon? What good do we wish to see achieved?" (1992). In fact, Buckland makes it clear that we need to first be aware of what the problems are in the Paper Library so we know what should be remedied. Since traditional reserves are not used by most of the students who should be using them, this should be classified as a "problem."

Petersen (1996) began the process of examining the problems of the reserve system in her study of student attitudes toward an electronic reserve system among undergraduate students at the University of North Carolina, Chapel Hill. An electronic reserve system is defined as a reserve reading system where the full text of the readings are on-line for students to access via computer. The study surveyed students as they were using the traditional paper-based reserve reading material. The purpose was "to determine how students use paper-based reserves, where the failures of traditional reserves lie, what level of expertise and familiarity students have with computers and networked resources, and how electronic reserves might alter the way students use reserve" (Petersen, 1996). Although this was beneficial to determine what current users would like in electronic reserve it does little to tell us what students who are not using the current system would appreciate. The fact that many students are not using the current system may be the biggest "failure" of the traditional reserve reading system and the area that most needs improvement.

The idea for this study evolved from the conclusions of the preceding research:

- There is a high rate of non-use in the reserve reading collection.
- Students report that non-use can often be attributed to the arrangement of the collection.
- Use of the reserve reading collection can have educational benefits.

It is thought that electronic reserve can address the first two concerns resulting in more students experiencing the benefits of the third point.

Methodology

This study, then, sought to examine the reasons some students are not using the traditional reserve reading system. It also attempted to learn these students' attitude toward an electronic reserve system. The rationale for this was that in knowing where the failures lie in getting students to use the

traditional reserve system we may be able to eliminate the problems in the design and use of an electronic system. Three hypotheses were tested in the study:

1. The reasons that students do not use the reserve system are varied but access to the material is considered a key factor.
2. Current non-users of the traditional reserve system would welcome an electronic reserve system because it removes those perceived barriers to access.
3. Current users of the traditional reserve system would have similar attitudes as those surveyed in the Petersen study.

The research was accomplished through a questionnaire administered to three classes with 10 or more reserve readings in the R.B. House Undergraduate Library at the University of North Carolina, Chapel Hill during Spring Semester, 1998. The classes selected included one from humanities, one from social science and one from natural sciences; class size and course level were kept constant. The questionnaire was administered during the class that the readings were for. All students received the same questionnaire.

The initial question of the survey asked the student to rate himself or herself as to how much he/she had read of the reserve readings that were assigned for the class (none, some, most, all). An open-ended question of "why?" was then asked to allow for explanation of his/her actions. The answers to the "why" question were later grouped into the categories Jacobs had used in her study of student attitudes toward reserve.

A direct comparison to the Petersen study would not be valid since no effort was made to question the same population. In fact, the purpose of this study was *not* to question the same sample of

students. But since all students in a class were surveyed, some would naturally be classified as users; therefore, an informal comparison was made against the Petersen study.

Results

A total of 132 students filled out the questionnaire (see Appendix A); 36 from humanities; 59 from social science; and 37 from natural science. Computations were done using Statistical Package for the Social Sciences (see Appendix B for the Codebook).

When the students were questioned whether or not they had ever read the selections/holdings for their classes that were placed on reserve in the Undergraduate Library 96.2% responded yes, 3.8% responded no. However, when asked how many of the reserve readings that had been assigned for *this* class prior to this date, their answers were more evenly distributed -- all 23.5%; most 28.8%; some 25.0%; none 22.7%. When asked how many they think they would have read if the full-text of the reserve readings were available online or electronically the number of reported readings increased -- all 50.4%; most 27.5%; some 13.7%; none 8.4%.

Most students find out about the reserve readings from their professor (56.3%) or from the course syllabus (34.9%) with a few using the card catalog (8.7%). After checking out the material, 72.6% report that they photocopy the readings while 27.4% read them in the library. In response to the question asking what they find most frustrating about the availability of reserve materials, 32.5% responded "available only at the UL"; 32.5% responded "waiting if someone has it out" while 27.0% reported that they don't usually have problems and 7.9% responded "other." In response to the question asking what they find most frustrating about the condition of reserve photocopies, 37.3% responded "poor quality copies"; 11.1% responded "pages marked, damaged, or torn"; 10.3% "pages not in order";

9.5% responded "readings with missing pages" while 26.2% reported that they don't usually have problems and 5.6% responded "other."

When questioned whether they thought they would be more likely to read the reserve readings if the full-text were available online or electronically, 70.5% responded that they would be more likely, 28.0% said "the same" and 1.5% responded they would be less likely. If the full-text of the reserve readings was available online or electronically, the majority of students (75.8%) report that they would be more likely to print them out and read them from a paper copy, as opposed to 24.2% who would read them on the computer screen. Fifty-five percent of students would like to be able to download readings to a disk and have them available as word processed documents that they could edit or change; 35.6% didn't care/no opinion, and 9.1% said they wouldn't like this option.

When asked what features they would like in an electronic reserve system, other than printing, 51.5% responded they would like to be able to email a copy of the article; 26.9% said they would like to be able to download; 20% said none of the options were important and less than one percent reported either "fax" or "other."

In regard to access to the system, 77.3% responded that 24 hour, seven day access was "essential or very important"; 22.7% responded that access during standard hours was acceptable. Seventy-one percent responded that it would be important to access the reserve readings from outside the library or from off-campus while 28% said it would be "nice, but not important to me."

A cross tabulation was performed to compare current use of the reserve system with the reasons given to the question "why." It appears that non-users are more likely to respond that it is the arrangement of reserve that makes it impossible to use (62%); 20% of non-users responded that their own circumstances make reserve impossible to use; 12% thought reserve were necessary; 4% reported

they could not find the appropriate material in the reserve collection and 2% thought reserve readings were not necessary. Among the answers grouped into this category (arrangement of reserve) 23 out of 39 (60%) specifically mentioned that not doing the readings had to do with travelling to the Undergraduate Library to access the material. So while the reasons students give for not using the reserve system are varied, it appears that it is most often the physical access to the collection that contributes to non-users not reading the material.

A relationship also appears to exist between use/non-use and whether the student reports he/she would be more likely to read the material if it were available electronically. A majority of non-users (87.3%) reported they would be more likely to read the reserve readings if the full text were available on-line while 12.7% expected to read the same or less. This compares to 55.1% of users who would read more while 44.9% of users would read the same or less. The observed relationship between use/non-use and the likelihood of reading the material is a statistically significant one (Chi-Square = 16.43, df = 1, sig. = .000). Non-users, therefore, would welcome an electronic reserve system, supporting the second hypothesis.

An informal comparison was also done between responses of the users in this study and the responses of the subjects in the Petersen study. A number of similarities and differences were observed. Similar responses observed were:

- The majority of students photocopy the traditional reserves (73.5% users; 74.5% Petersen) as opposed to reading them in the library (26.5% users; 25.5% Petersen)
- The majority of students report they would print the articles from an electronic reserve system (75.4% users; 82.7% Petersen) as opposed to reading them on the screen (24.6% users; 17.3% Petersen)

- The majority of students would like to download the readings to a disk (56.4% of users; 61.7% Petersen) with approximately 30% of students having no opinion or not caring (30.4% users; 30.6% Petersen) and some students saying they wouldn't like this feature (13% of users; 7.7% Petersen).

There were also a number of differences observed.

On the question of finding out what is on reserve, the users in the present study consulted the course syllabus more often (61.8%) while 29.4% received their information from the professor or instructor and 8.8% found the information from the catalog. In the Petersen study, 19.9% found it from the course syllabus, 61.2% got the information from the professor or instructor, 17.3% used the library catalog and 1.5% consulted friends.

The users in this study were more evenly distributed in their reporting of problems having to do with availability of the reserve materials (35.3% available only at UL; 22.1% waiting if someone has it out, 7.9% other and 35.3% of respondents don't usually have a problem). This differs from the Petersen study where more respondents had a problem with waiting if someone has it out (45%); only 13.8% reported a problem of having it only available at UL, 7.3% other and 33.8% of respondents don't usually have a problem.

Answers to the question concerning what students found most frustrating about the condition of reserve photocopies also revealed some differences. More students in this study reported poor quality copies as the most frustrating concern (42.6%) as opposed to Petersen's study where only 19.0% said this was a problem. In the Petersen study, 21.5% of respondents cited readings with missing pages as the greatest concern.

A greater number of users responded that having access to an electronic system 24 hours a day, seven days a week would be essential or very important (82.6%); the figures for the Petersen study were lower (61.2%). The current users also felt access from outside the library was essential or very important in greater numbers than in the Petersen sample (78.3% users; 44.6% Petersen).

Conclusion

The results of this study indicate that use of the reserve system may actually increase with the implementation of an electronic reserve system. Both users and non-users of the current paper-based reserve system perceive an electronic reserve system as being beneficial and they report they will read more of the reserve readings if they become available electronically. This is particularly true for those students who aren't currently reading the reserve readings.

Most of the problems reported by the students in regard to the traditional reserve system have to do with accessing the readings and the physical condition of the readings. Electronic reserves would eliminate the problems students currently report with the paper versions. These problems include:

- The readings are only available at the Undergraduate Library.
- Waiting if someone has already checked the material out.
- Poor quality copies.
- Pages marked, damaged or torn.
- Pages not in order.
- Missing pages.

It was also very clear from the study that access 24 hours per day, seven days a week from outside the library are important to the students. It is suggested that this be incorporated into the electronic system, otherwise the benefit of eliminating the problem of access may not be realized.

With the implementation of an electronic reserve system the amount of students reading the assignments that the professors have decided are important should increase. This, in turn, should have a positive effect on student grades and their understanding of their course material.

References

Buckland, M. (1992) . Print, Automated, Electronic: University libraries in the next decade. In W. B. Rayward (Ed.), Confronting the Future: University Libraries in the Next Decade. Proceedings of a Conference at the University of New South Wales (pp. 35-40) . Kensington, New South Wales, Australia. (ERIC Document Reproduction Service No. ED 352 993).

Carmack, B., & Loeber, T. (1971) . The library reserve system – another look. College and Research Libraries, 32, 105-109.

Jacobs, N. A. (1996) . Student's perceptions of the library services at the University of Sussex: Practical quantitative and qualitative research in an academic library. Journal of Documentation, 52 (2), 139-162.

Petersen, L. (1996). What Do Students Want From Electronic Reserves? Unpublished master's thesis, University of North Carolina, Chapel Hill.

Self, J. (1987) . Reserve readings and student grades: Analysis of a case study. Library and Information Science Research, 9 (1), 29-40.

Appendix A

Survey Responses

1. Some students do not read the selections/holdings that are placed on reserve in the Undergraduate Library. How many of the reserve readings, that have been assigned for *this* class prior to this date, have you read?

None	22.7%
Some	25.0%
Most	28.8%
All	23.5%

Why?

Personal benefits	10.2%
Necessary	36.1%
Not necessary	1.9%
Material not in reserve	2.8%
Arrangement of reserve	38.0%
Personal reasons not to use	11.1%

2. If the full-text of the reserve readings were available online or electronically, how many do you think you would have read?

None	8.4%
Some	13.7%
Most	27.5%
All	50.4%

3. Have you ever read the selections/holdings for your classes that were placed on reserve in the Undergraduate Library?

Yes	96.2%
No	3.8%

4. How do you usually find out what is on reserve?

	All respondents	Users	Petersen study
Professor or instructor	34.9%	29.4%	61.2%
The course syllabus	56.3%	61.8%	19.9%
Friends			1.5%
The library catalog	8.7%	8.8%	17.3%

5. What do you usually do with photocopied reserve readings immediately after you check them out?

	All respondents	Users	Petersen study
Photocopy them	72.6%	73.5%	74.5%
Read them in the library	27.4%	26.5%	25.5%

6. What do you find most frustrating about the availability of reserve materials?

	All respondents	Users	Petersen study
Available only at the UL	32.5%	35.3%	13.8%
Waiting if someone has it out	32.5%	22.1%	45.1%
Don't usually have problems	27.0%	35.3%	33.8%
Other	7.9%	7.4%	7.3%

7. What do you find most frustrating about the condition of reserve photocopies?

	All respondents	Users	Petersen study
Readings with missing pages	9.5%	5.9%	21.5%
Pages not in order	10.3%	4.4%	11.8%
Pages marked, damaged, or torn	11.1%	11.8%	10.8%
Poor quality copies	37.3%	42.6%	19.0%
Don't usually have problems	26.2%	27.9%	30.3%
Other	5.6%	7.4%	6.7%

8. If the full-text of reserve readings was available online or electronically, do you think you would be more likely to read the material?

	All respondents	Users	Petersen study
More likely	70.5%	55.1%	NA
The same	28.0%	42.0%	NA
Less likely	1.5%	2.9%	NA

9. If the full-text of reserve readings was available online or electronically, do you think you would be more likely to read and study those readings directly from a computer screen or more likely to just print them out and read them from a paper copy?

	All respondents	Users	Petersen study
Read them on computer screen	24.2%	24.6%	17.3%
Print them	75.8%	75.4%	82.7%

10. Would you like to be able to download readings to your own disk and have them available as word processed documents that you could edit or change?

	All respondents	Users	Petersen study
Yes	55.3%	56.5%	61.7%
Don't care; no opinion	35.6%	30.4%	30.6%
No	9.1%	13.0%	7.7%

11. Aside from printing, what other output option would you most like to see in an electronic reserve system?

	All respondents	Users	Petersen study
Send a copy to email account	51.5%	50.0%	44.9%
Download to my own disk	26.9%	25.0%	29.6%
Fax	0.8%		1.0%
Other	0.8%	1.5%	0.5%
None of these are important	20.0%	23.5%	24.0%

12. If UNC purchases and implements an electronic reserve system, how important would it be to you to have access to the system 24 hours a day, 7 days a week?

	All respondents	Users	Petersen study
Essential or very important	77.3%	82.6%	61.2%
Access during standard hours	22.7%	17.4%	38.8%

13. If UNC purchases and implements an electronic reserve system, how important would it be to you to be able to get access to reserve readings from outside the library or from off-campus?

	All respondents	Users	Petersen study
Essential or very important	71.2%	78.3%	44.6%
Nice, but not important to me	28.0%	21.7%	47.7%
It's not important at all	0.8%		7.7%

Appendix B

Codebook

VAR1	SurveyNm			
VAR2	ClassGrp	S=0 H=1 N=2	Social Science Humanities Natural Science	
VAR3	ThisClas	0=None 1=Some 2=Most 3=All		**Question 1**
VAR4	Ereserve	0=None 1=Some 2=Most 3=All		**Question 2**
VAR5	EverRead	1=Yes 0=No		**Question 3**
VAR6	FindRes	0=My professor or instructor 1=The course syllabus 2=Friends 3=The library's catalog 4=Other		**Question 4**
VAR7	CopyRead	0=Photocopy them 1=Read them in the library		**Question 5**
VAR8	Availabl	0=Having them available only at the UL 1=Having to wait if someone already has checked out what I need 2=I don't usually have any problems with the availability of reserve readings 3=Other		**Question 6**
VAR9	Cndition	0=Readings with missing pages 1=Pages not in order 2=Pages marked up, damaged or torn 3=Poor quality copies 4=I don't usually encounter any problems of this sort 5=Other		**Question 7**

VAR10	FullText	2=More likely 1=The same 0=Less likely	**Question 8**
VAR11	ERRead	1=Read them on the computer screen 0=Print them	**Question 9**
VAR12	Download	1=Yes 2=Don't care; no opinion 0=No	**Question 10**
VAR13	Output	4=Being able to send a copy to my email account 3=Download to my own disk 2=Fax 1=Other 0=None of these are important to me	**Question 11**
VAR14	24/7	1=Essential or very important 0=Access only during standard library hours would be okay	**Question 12**
VAR15	Outsdlib	2=Essential or very important 1=It would be nice, but it's not that important to me 0=It's not important at all	**Question 13**
VAR16	Groups	0=non-users 1=users	**derived from variable 3**
VAR17	Why	5=Reserve has positive benefits 4=Necessity 3=Not necessary 2=Appropriate material is not in the Reserve collection 1=The arrangements of reserve make it impossible to use 0=My arrangements make reserve impossible to use	**Question 1**

MISSING VALUES = 9